STIC Search Report
EIC 1700

STIC Database Tracking Number: 220843

TO: Marianne L Padgett
Location: REM 8D71
Art Unit: 1762
April 3, 2007

Case Serial Number: 10/803199

From: Kendra Banks
Location: EIC 1700
REMSEN 4B28
Phone: 571/272-2516
Kendra.Banks@uspto.gov

Search Notes

No Cases Reported

US 6,040,057

PATNO IS 6040057

DATE: APRIL 3, 2007
LIBRARY: PATENT
FILE: ALL

Your search request is:
PATNO IS 6040057

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LEVEL 1... 1

Your search request has found 1 PATENT through Level 1.
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LEVEL 1 - 1 PATENT

1. 6040057 , March 21, 2000 , Enhancing the strength, moisture resistance, and fire-resistance of wood, timber, lumber, similar plant-derived construction and building materials, and other cellulosic materials, Slimak, Robert A. - Springfield, Virginia, United States (US); Haudenschild, Christian C. - Derwood, Maryland, United States (US); Slimak, Karen M. - P.O. Box 2444, Springfield, Virginia, United States (US), 843160 (08), September 24, 1999 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., SLIMAK, KAREN M. 9207 SHOTGUN COURTSPRINGFIELD, VIRGINIA, 22153, Reel and Frame Number: 010262/0882, Slimak, Karen M., Springfield, Virginia, United States (US), United States individual (04)

CORE TERMS: wood, sodium silicate, silicate, soaked, fire retardant, sample, microwave, resistant, alkali, minute ...

LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6040057

March 21, 2000

Enhancing the strength, moisture resistance, and fire-resistance of wood, timber, lumber, similar plant-derived construction and building materials, and other cellulosic materials

REISSUE: March 18, 2004 - Reissue Application filed Ex. Gp.: 1762; Re. S.N. 10/803,199 (O.G. October 26, 2004)

APPL-NO: 843160 (08)

FILED-DATE: April 11, 1997

GRANTED-DATE: March 21, 2000

CORE TERMS: wood, sodium silicate, silicate, soaked, fire retardant, sample, microwave, resistant, alkali, minute ...

6040057 OR 6,040,057

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6040057 OR 6,040,057

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Patent Search 6040057 4/3/2007

No cases found.

Return to Search

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Current session 03/04/2007

Query/Command : FILE PLUSPAT

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 Last update of file: 2007/03/28 (YYYY/MM/DD) 2007-12/UP (last update)

Search statement   1
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Query/Command : US6040057/PN

**** SS 1: Results 1**

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Search statement   2
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Query/Command : PRT FULL NONSTOP LEGALALL

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1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

PN - US6040057 A 20000321 [US6040057]

TI - (A) Enhancing the strength, moisture resistance, and fire-resistance of wood, timber, lumber, similar plant-derived construction and building materials, and other cellulosic materials

PA - (A) SLIMAK KAREN M (US)

PA0 - Slimak, Karen M., Springfield VA [US]

IN - (A) SLIMAK ROBERT A (US); HAUDENSCHILD CHRISTIAN C (US); SLIMAK KAREN M (US)

AP - US84316097 19970411 [1997US-0843160]

PR - US84316097 19970411 [1997US-0843160]

IC - (A) B05D-001/18 B05D-003/02

ICAA - B05D-001/18 [2006-01 A - I R M EP]; B05D-003/02 [2006-01 A - I R M EP]

ICCA - B05D-001/18 [2006 C - I R M EP]; B05D-003/02 [2006 C - I R M EP]

PCL - ORIGINAL (O) : 428453000; CROSS-REFERENCE (X) : 427397800 427439000 427440000 427542000 427553000 427554000 428537100

DT - Basic

CT -

US--51702; US--63618; US--74225; US--74587; US--80086; US-109002; US-293785; US-539928; US-620446; US-627008; US-629600; US1111021; US1125445; US1168831; US1524676; US1532908; US1564706; US1819364; US2041120; US2340728; US2438339; US2647069; US3656975; US3663249; US3663355; US3667978; US3974318; US4443520; US4642268; US4746555; US5205874; US5236499; US5478598

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STG - (A) United States patent

AB - Materials variously treated with sodium silicate were studied until enough information was obtained to find a way to solve the problems that have prevented sodium silicate from being the used as a fire retardant. These problems are: 1) water solubility (miscible with water), which results in extensive leaching when exposed to water, 2) cracking, chipping and peeling of treated surfaces, and 3) surface granulation. During flame tests it was discovered that sodium silicate formed a foam-like material, and this material was found to have become water insoluble, yet its elemental composition had remained virtually identical to that of the unmodified sodium silicate. This investigator proposes that under the influence of heat and dehydration, sodium silicate undergoes a polymerization process resulting in particles sizes too large to dissolve in water, and then developed a mechanism to explain how the process could occur. The temperature and moisture conditions in treated samples were then manipulated to cause the polymerization process to occur while protecting the wood from damage. Thus samples were prepared that were both water insoluble, and possessed effective fire retardant properties. These samples also proved to be stronger than untreated wood, thus providing an improved product that was fire retardant and moisture resistant. Since aqueous sodium silicate can be combined with other inorganic fire retardants, this technique is a potential method for making any inorganic fire retardants moisture resistant. This represents a potential breakthrough in fire retardants that has been sought for approximately 100 years. In addition, sodium silicate treated samples were made moisture resistant by the application of a micro-thin layer of silicon monoxide to the surface of samples. This technique, also never tried before, represents a second method for providing moisture resistant, fire retardant substances.

UP - 2000-13

1/1 LGST - ©EPO

PN - US6040057 A 20000321 [US6040057]

AP - US84316097 19970411 [1997US-0843160]

ACT - 20041026 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20040318

UP - 2004-46

1/1 CRXX - ©CLAIMS/RRX

PN - 6,040,057 A 20000321 [US6040057]

PA - Slimak; Karen M.

ACT - 19990924 REASSIGNED
ASSIGNMENT OF ASSIGNORS INTEREST

Assignor: SLIMAK, ROBERT A. DATE SIGNED: 04/11/1997
HAUDENSCHILD, CHRISTIAN C. DATE SIGNED: 04/11/1997

Assignee: SLIMAK, KAREN M. 9207 SHOTGUN COURT SPRINGFIELD VIRGINIA 22153

Reel 010262/Frame 0882

Contact: STEVENS, DAVIS, MILLER & MOSHER THOMAS P. PAVELKO 1615 L STREET NW, SUITE 850 WASHINGTON, DC 20043-4387

20040318 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20041026
REISSUE REQUEST NUMBER: 10/803199
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1762

Reissue Patent Number:

Search statement 2

Query/Command : FILE INPADOC

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LGST          - Time in minutes :    0,05
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PLUSPAT       - Time in minutes :    0,33
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Records displayed and billed   :      1
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 Last update of file: 2007/03/28 (YYYY/MM/DD) 2007-12/UP (last update)

Search statement   2
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Query/Command : FAM US6040057/PN

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1 Patent Groups
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**** SS 2: Results 1**

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Search statement   3
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Query/Command : FAMSTATE NONSTOP

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PN - US6040057 A 20000321 [US6040057]

STG - (A) United States patent

TI - (A) Enhancing the strength, moisture resistance, and fire-resistance of wood, timber, lumber, similar plant-derived construction and building materials, and other cellulosic materials

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IC - (A) B05D-001/18 B05D-003/02

AP - US84316097 19970411 [1997US-0843160]

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ICCA - B05D-001/18 [2006 C - I R M EP]; B05D-003/02 [2006 C - I R M EP]

PCL - ORIGINAL (O) : 428453000; CROSS-REFERENCE (X) : 427397800 427439000 427440000 427542000 427553000 427554000 428537100

DT - Basic

UP - 2000-13

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PN - US6040057 A 20000321 [US6040057]

AP - US84316097 19970411 [1997US-0843160]

ACTE - 20041026 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20040318

UP - 2004-46

Search statement 3